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country such as Sweden. In most rural areas primary health care has a high status, a central role, and is utilized for most first-level care. However, in the large cities primary health care has to compete with private specialists and with specialists in hospitals. Therefore, primary health care in Sweden is not of a single type, its design and characteristics varies between counties and between rural and urban areas as foreseen in the Health Care Act. These variations are associated with social and geographical factors as well as the local political situation. However, the overall finding from several studies is that 'physicians are not satisfied with their working conditions'. To alleviate this generally accepted problem the government has proposed a new 'Plan-of-action' for health care in Sweden. One of the main targets is the unsatisfactory conditions in primary care.<sup>12</sup>

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#### Response

Sir,

Thank you for the opportunity to respond to Professors Karlberg and Allebeck reaction to my article, 'Internal market systems in Sweden' which appeared in the December 2001 issue of your paper.

Rather than respond to every single issue raised by my colleagues, I have decided, instead, to highlight four areas central to my paper.

First, as described in the methods section of my paper, the study was a follow up to a previous one undertaken several years ago focusing on the changing views of scholars and physicians well-vested with all the major changes in Swedish health care. As indicated in the paper, 28 people were interviewed. 15 primary care physicians, 4 heads of departments county council members and 4 health economists. My results were based on a careful evaluation of their responses (Key informants were identified using the snowball effect). The fact that some of the informants worked for the government did not in any way distract from their assessment of their changes as they saw them. To suggest that there is only way to assess changes and it must be those my colleagues approve or know is unfortunate.

Second, the assertion that the effect of the Stockholm model as it relates to its efficiency and productivity is not supported by other studies is not true. It fliers in the face of other documented research from Spri and recently from the works by others. See Forsberg, Axelsson and Arnetz 'In Performance-based reimbursement in health care' *European Journal of Public Health* 2002;12(1).

Thirdly, while I may not have access to all research done on the subject, it strikes me as odd that my colleagues would assert that because in their study they found that 'physicians are not satisfied with their working conditions' somehow invalidate my findings. After all, as the authors are aware, dissatisfaction can be explained in several ways and there are other factors - individual choices, career choices, age, place of practice, decision to doctor etc - all can influence the level of satisfaction among physicians. Several of the physicians interviewed were in private practice and were heads of departments and thus may have different working experiences.

Fourthly, their assessment of the degree of decentralization within county councils was right and as I argued, the

degree of decentralization in the Swedish system allows for the different experimentation in health care. It is also true that whether by accident, or design, the privatization initiatives have all been undertaken under the Conservative government. The fact that the family doctors act ws repealed and a stop was put on further privatization in health care system lead me to conclude that politics play a major role in health care.

The introduction of the adel reform was in 1992, not 1990 as I reported. It was meant to read [the 1990s], This was an error and I stand corrected but it must be pointed out that it did not take away from the significant point made about the reform, I do welcome the suggestions by Professors Allebeck and Karlberg and I thank them for pointing out new directions for further study.

In sum, the points raised are minor and I do feel they do not in any way distract from the findings of the paper. Given the sample size, one would expect to find that my findings may not necessarily reflect the perspectives of all health economists nor of all physicians. Rather, the their knowledge and perspectives should be seen from the context of their experiences. That these findings are supported by other studies suggest that the study was methodologically sound and the conclusion was based on a careful assessment of the data reported.

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#### Untreated dental caries is common among 6 to 12-year-old physically abused/neglected children in Spain

Surveys of untreated decayed teeth prevalence were carried out from 1992 to 2001 in physically abused/neglected children admitted to public institutional facilities (protective and foster care systems), in Zaragoza City, Community of Aragón, Spain. The study included 236 children (56.8% boys / 43.2% girls), with an average age of 9.6 years (age range 6-12 years). At placement, oral health status was assessed following the basic survey method recommended by the 1987 World Health Organisation caries criteria. Presence of untreated decayed teeth was determined from the decayed and unfilled components (d/D) of the dmft/DMFT indices.

The presence of untreated decayed teeth was observed in 119 (50.4%) physically

abused/neglected children. Of these, 70 (58.8%) were boys and 49 (41.2%) were girls (52.2% and 48% of the total boys and girls, respectively). Mean d and D component value was 1.90 (mean d value of 1.29 / mean D value of 0.61). There were no significant differences between genders.

The prevalence of untreated decayed teeth among 6 to 12-year-old physically abused/neglected children was higher than 6 to 12-year-old normal children in Spain,<sup>1</sup> and in other developed countries.<sup>2,3</sup> Results of this study were consistent with those documented in other nations that abused/neglected children are more likely to have untreated decayed teeth than non-abused/non-neglected children.<sup>4,5</sup>

Many individual and familiar behavioural and environmental factors contribute to the high level of untreated decayed teeth among abused/neglected children. These factors including low social class, low socio-economic status, social deprivation, poor hygiene and nutritional status, family isolation and disintegration, educational failure, on dental health habits and care, lack of perceived value of oral health, and wilful dental neglect of parent or caregivers.<sup>4-7</sup>

This study indicates that 6 to 12-year-old physically abused/neglected children, in Spain have high levels of need for dental treatment and oral health promotion services. Placement in protective and foster care systems presents a unique opportunity to address the basic oral health concerns of this high-risk population, and also to provide dental treatment. Dental care for these children requires more knowledge of social welfare workers and childhood dental care providers.

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#### Seat belt use among adolescents in a developing country

Seatbelt use among adolescents is an important risk behaviour not adequately addressed in Lebanon. This is of paramount importance in view of the high mortality and morbidity related to car accidents.<sup>1</sup> The prevalence of seatbelt use and support for governmental legislation policies for seatbelt use among university students in Lebanon were studied. The study was cross sectional in nature. Between February and June 2000, 553 randomly selected students were recruited from four major Lebanese universities located in Beirut. Participants completed a self-administered anonymous questionnaire that included items on current seat belt use, demographic, scholastic, and health behavioural characteristics. The chi square statistic was calculated to test the relation between seatbelt use, support for legislation and the above-mentioned variables. The average age of students recruited was 20.5 years; 57% were males and the majority were registered in private universities (71%). The fields of study were: Arts and Sciences (54%), Engineering (19%), Law (14%) and Health Sciences (10%). Moreover, 53% of the students smoked cigarettes and/or Narghile, 37% drank alcohol at least once per week and 5% consumed excessive amounts (defined as >7 pints per week). The prevalence of seatbelt use was 37%, lower than previously reported at 50%, in countries legislating seatbelt use.<sup>2</sup> Even though information on support for legislative policies may not reflect behaviour of drivers regarding seat belt use, only 14% of the students did not support laws regarding seatbelt use. No significant difference in seatbelt use was observed across gender groups, type of university or fields of studies. While seatbelt use was not significantly associated with smoking, students who drink alcohol (at least once per week) had a significantly higher proportion of seatbelt use than non-drinkers (44.6% vs.

33.1% respectively,  $p < 0.01$ ). However, this relation did not persist when excessive amounts of alcohol drinking was considered. In discordance with others, there was no female preponderance for encouragement of legislative policies for seatbelt use.<sup>3</sup> However, students in public universities significantly supported such laws compared to those in private universities (94% vs. 83%,  $p < 0.01$ ). It is possible that public students may perceive seat belt law as a health guarantor in the absence of private health guarantors, but further analysis is required to confirm this. The proportion of students supporting seatbelt law was highest among law students (95%) and lowest among those in Arts/Sciences (82%), ( $p < 0.001$ ). This finding may be attributed to better knowledge and the identification of law students with rules and regulations. Similar to other studies, the proportion of students supporting such laws was significantly higher ( $p < 0.05$ ) among non-smoking (89%) than smoking students (78%).<sup>4</sup> These results could not be generalized to all adolescent car drivers in the country. However, a rate of 37% is not discouraging considering the absence of laws and the high proportion (86.4%) of students asking for such laws. Introducing seatbelt laws coupled with publicized campaigns would facilitate widespread seatbelt use among this group and this needs to be seriously considered, evaluated, and implemented. Investment in this group of adolescents looks to be rewarding and promising.

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